

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-600 REV E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-600 REV 5

REF. TCCA STC: SH93-88

REF. FAA STC: SR00098NY and SR00099NY

REF. EASA STC EASA.IM.R.S.01292

1.0 PURPOSE

In response to customer feedback, Dart is implementing changes designed to ease the mounting of hinge brackets for the forward opening Spacepod and to improve the security of the hinge assemblies. The purpose of this DSI is to introduce the DSI 9701-011 Hinge Shim Kit and to provide instructions and parts lists to install and assemble the hinges on Dart Spacepods D350-600-241/-242/-243/-247/-248/-249. One Kit is required per door.

2.0 PROCEDURE

- 2.1 Remove the D3186-3/-4 Spacepod Door by disconnecting the hinges.
- 2.2 Remove the D3538-1 Hinge Brackets and D2179 Hinge Bracket Plates. Retain all parts.
- 2.3 Re-install the D3538-1 Hinge Brackets with the D5127-3 Shims between the Spacepod and Hinge Bracket using the existing mounting holes and fasteners. See Figure 1. The D3538-1 Hinge Brackets should be oriented as per Table 1. It may be necessary to reverse the orientation, as required, on some Spacepod bodies. Furthermore, due to normal variations in the Spacepod geometry, additional shimming may be required. It is acceptable to use Hysol Liquid Shim, thin washers or shims fabricated from 6061-T6 aluminum for this purpose.
- 2.4 Torque fasteners to 9-12 in-lbs (1-1.4 N-m).

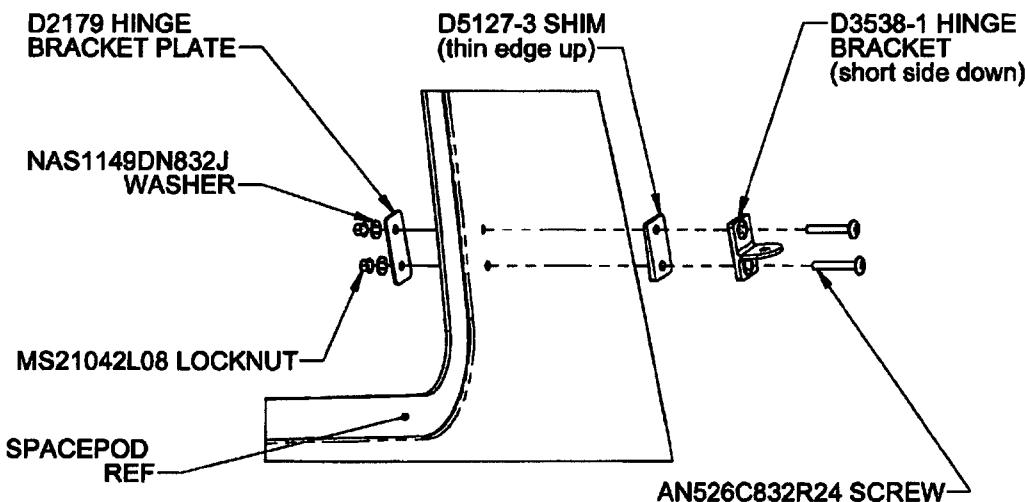


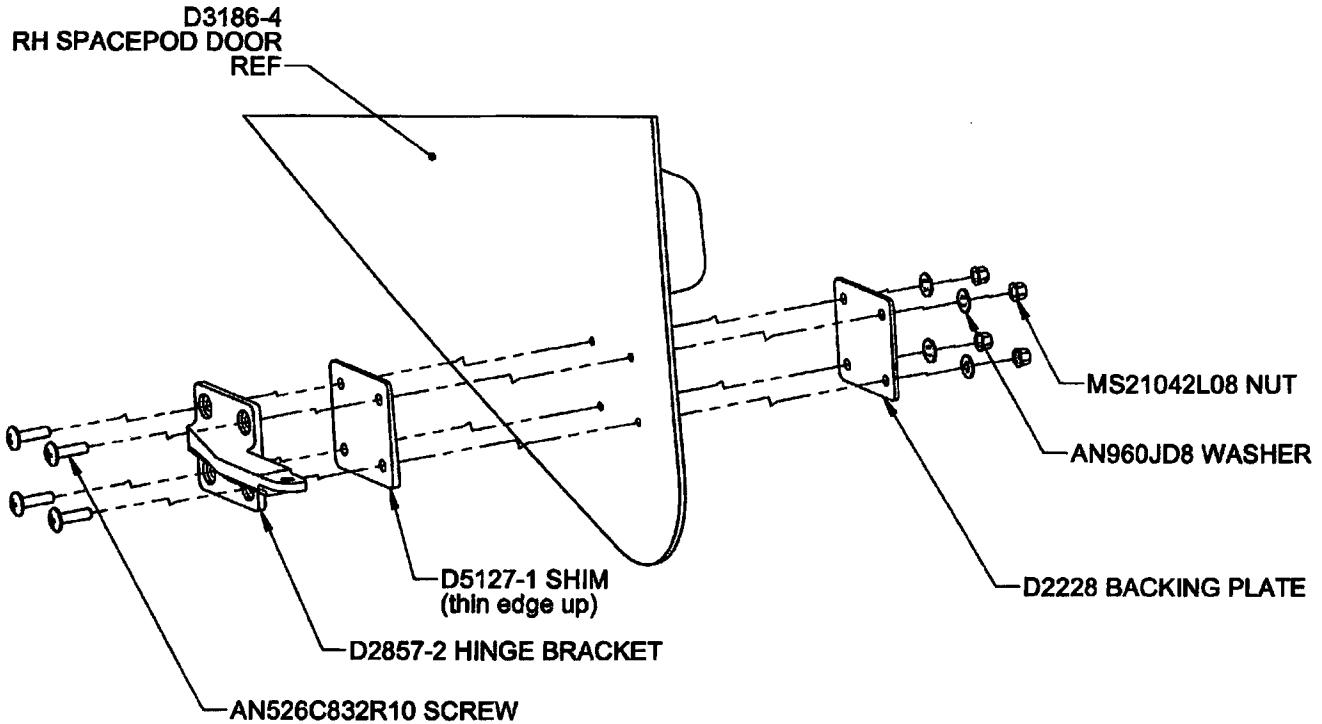
FIGURE 1: SPACEPOD HINGE INSTALLATION
(LOWER HINGE, RH DOOR SHOWN)

SPACEPOD	UPPER D3538-1 BRACKET	LOWER D3538-1 BRACKET
RIGHT SIDE	SHORT SIDE UP	SHORT SIDE DOWN
LEFT SIDE	SHORT SIDE DOWN	SHORT SIDE UP

TABLE 1: D3538-1 HINGE ORIENTATION

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED <i>[Signature]</i>	D. SHEPHERD (DE # 02)
BY:	
DATE:	14.09.09
CERT. NO.:	SH93-88
ISSUE NO.:	6

B	ADD NOTES ALLOWING USE OF ADDITIONAL SHIM MATERIALS, ALTERNATE SHIM ORIENTATION		DB	14.09.09
A	NEW ISSUE		DB	14.07.21
REV.	DESCRIPTION		BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	DB			
CHECKED	<i>1</i>	DRAWING NO. DSI 9701		
MFG. APPR.	N/A			
APPROVED	<i>W</i>	REV. B SHEET 1 OF 3		
DE APPR.	<i>H</i>			
DATE	14.09.09	TITLE	SCALE NTS	
HINGE SHIM KIT				
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**FIGURE 2: SPACEPOD DOOR HINGE INSTALLATION
(LOWER HINGE, RH DOOR SHOWN)**

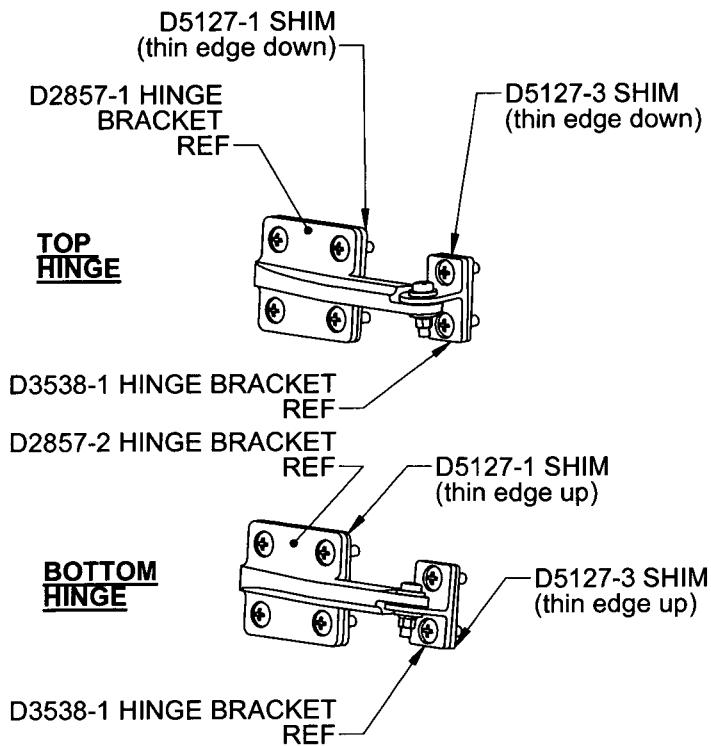
- 2.5 Remove the D2857-1/-2 Hinge Brackets and D2228 Backing Plates. Retain all parts and fasteners.
- 2.6 Re-install the D2857-1/-2 Hinge Brackets with the D5127-1 Shim between the Spacepod Door and Hinge Brackets, using the existing mounting holes and fasteners. See Figure 2. The hinge brackets should be installed as shown in Table 2. Shims can be re-oriented, as required, to provide the best mounting configuration. Furthermore, due to normal variations in the Spacepod geometry, additional shimming may be required. It is acceptable to use Hysol Liquid Shim, thin washers or shims fabricated from 6061-T6 aluminum for this purpose.
- B** 2.7 Torque fasteners to 9-12 in-lbs (1-1.4 N-m).
- 2.8 Re-install the D3186-3/-4 Spacepod Door onto the Spacepod per Section 52.4 of ICA-D350-600. See Figure 3 for reference.

DOOR	UPPER HINGE BRACKET	LOWER HINGE BRACKET
RIGHT SIDE	D2857-1	D2857-2
LEFT SIDE	D2857-2	D2857-1

TABLE 2: HINGE SELECTION CHART

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED <i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
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DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	DB	
CHECKED	<i>b</i>	DRAWING NO. DSI 9701
MFG. APPR.	N/A	
APPROVED	<i>MP</i>	REV. B SHEET 2 OF 3
DE APPR.	<i>T</i>	
DATE	14.09.09	TITLE HINGE SHIM KIT
SCALE NTS		
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**FIGURE 3: DSI 9701-011 HINGE KIT ASSY
(RH DOOR ASSY SHOWN, LH OPPOSITE)**

3.0 PARTS LIST

QTY -011	P/N	DESCRIPTION
X	DSI 9701-011	HINGE SHIM KIT
2	D5127-1	SHIM, LARGE
2	D5127-3	SHIM, SMALL

4.0 WEIGHT AND BALANCE

There is no Weight and Balance change associated with this update.

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	<i>[Signature]</i>
D. SHEPHERD (DE # 02)	
DATE:	14.09.09
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CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9701	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	HINGE SHIM KIT	NTS
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